

```
Launched map tasks=2
Launched reduce tasks=1
Data-local map tasks=2
Total time spent by all maps in occupied slots (ms)=19256
Total time spent by all reduces in occupied slots (ms)=14970
Total time spent by all map tasks (ms)=4814
Total time spent by all reduce tasks (ms)=2495
Total vcore-milliseconds taken by all map tasks=4814
Total vcore-milliseconds taken by all reduce tasks=2495
Total megabyte-milliseconds taken by all map tasks=19718144
Total megabyte-milliseconds taken by all reduce tasks=15329280
Map-Reduce Framework
  Map input records=194
  Map output records=194
  Map output bytes=3208
  Map output materialized bytes=2705
  Input split bytes=180
  Combine input records=0
  Combine output records=0
  Reduce input groups=194
  Reduce shuffle bytes=2705
  Reduce input records=194
  Reduce output records=194
  Spilled Records=388
  Shuffled Maps =2
  Failed Shuffles=0
  Merged Map outputs=2
  GC time elapsed (ms)=634
  CPU time spent (ms)=12698
  Physical memory (bytes) snapshot=2568589312
  Virtual memory (bytes) snapshot=11205615616
  Total committed heap usage (bytes)=4419223552
Shuffle Errors
  BAD_ID=0
  CONNECTION=0
  IO_ERROR=0
  WRONG_LENGTH=0
  WRONG_MAP=0
  WRONG_REDUCE=0
File Input Format Counters
  Bytes Read=20082
File Output Format Counters
  Bytes Written=3268
20/12/02 20:50:24 INFO streaming.StreamJob: Output directory: /user/mlk512/job3
packageJobJar: [] [/opt/cloudera/parcels/CDH-5.15.2-1.cdh5.15.2.p0.3/jars/hadoop-streaming-2.6.0-cdh5.15.2.jar] /tmp/streamjob4093294160660800132.jar tmpDir=null
20/12/02 20:50:27 INFO mapred.FileInputFormat: Total input paths to process : 1
20/12/02 20:50:28 INFO mapreduce.JobSubmitter: number of splits=2
20/12/02 20:50:28 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1604346392376_7669
20/12/02 20:50:30 INFO impl.YarnClientImpl: Submitted application application_1604346392376_7669
20/12/02 20:50:30 INFO mapreduce.Job: The url to track the job: http://babar.es.its.nyu.edu:8088/proxy/application_1604346392376_7669/
20/12/02 20:50:30 INFO mapreduce.Job: Running job: job_1604346392376_7669
20/12/02 20:50:35 INFO mapreduce.Job: Job job_1604346392376_7669 running in uber mode : false
20/12/02 20:50:35 INFO mapreduce.Job: map 0% reduce 0%
20/12/02 20:50:39 INFO mapreduce.Job: map 100% reduce 0%
20/12/02 20:50:44 INFO mapreduce.Job: map 100% reduce 100%
20/12/02 20:50:45 INFO mapreduce.Job: Job job_1604346392376_7669 completed successfully
20/12/02 20:50:45 INFO mapreduce.Job: Counters: 49
File System Counters
  FILE: Number of bytes read=2302
  FILE: Number of bytes written=479164
  FILE: Number of read operations=0
  FILE: Number of large read operations=0
  FILE: Number of write operations=0
  HDFS: Number of bytes read=20262
  HDFS: Number of bytes written=3047
  HDFS: Number of read operations=9
  HDFS: Number of large read operations=0
  HDFS: Number of write operations=2
Job Counters
  Launched map tasks=2
  Launched reduce tasks=1
  Data-local map tasks=2
  Total time spent by all maps in occupied slots (ms)=17568
  Total time spent by all reduces in occupied slots (ms)=14964
  Total time spent by all map tasks (ms)=4392
  Total time spent by all reduce tasks (ms)=2494
  Total vcore-milliseconds taken by all map tasks=4392
  Total vcore-milliseconds taken by all reduce tasks=2494
  Total megabyte-milliseconds taken by all map tasks=17989632
  Total megabyte-milliseconds taken by all reduce tasks=15323136
Map-Reduce Framework
  Map input records=194
  Map output records=194
  Map output bytes=3047
  Map output materialized bytes=2386
  Input split bytes=180
  Combine input records=0
  Combine output records=0
  Reduce input groups=194
  Reduce shuffle bytes=2386
  Reduce input records=194
  Reduce output records=194
  Spilled Records=388
  Shuffled Maps =2
  Failed Shuffles=0
  Merged Map outputs=2
  GC time elapsed (ms)=380
  CPU time spent (ms)=7810
  Physical memory (bytes) snapshot=2046476288
  Virtual memory (bytes) snapshot=11206295552
  Total committed heap usage (bytes)=3974183040
Shuffle Errors
  BAD_ID=0
  CONNECTION=0
  IO_ERROR=0
  WRONG_LENGTH=0
  WRONG_MAP=0
  WRONG_REDUCE=0
File Input Format Counters
  Bytes Read=20082
File Output Format Counters
  Bytes Written=3047
20/12/02 20:50:45 INFO streaming.StreamJob: Output directory: /user/mlk512/job4
[mlk512@login-1 ~]$ ls
big-data-class  FinanceHadoop  hw2  hw3  hw4  hw5  hw8  smaWeather1.txt  spark.py  text
[mlk512@login-1 ~]$ hdfs dfs -ls
Found 14 items
drwxr-xr-x - mlk512 users 0 2020-12-02 20:41 .Trash
drwxr-xr-x - mlk512 users 0 2020-12-01 04:45 .sparkStaging
drwxr-xr-x - mlk512 users 0 2020-12-02 20:50 .staging
drwxr-xr-x - mlk512 users 0 2020-12-02 20:41 covid
drwxr-xr-x - mlk512 users 0 2020-09-18 17:12 hw2
drwxr-xr-x - mlk512 users 0 2020-09-22 14:14 hw3
drwxr-xr-x - mlk512 users 0 2020-10-14 10:36 hw4
drwxr-xr-x - mlk512 users 0 2020-10-25 21:21 hw5
drwxr-xr-x - mlk512 users 0 2020-11-20 03:50 hw8
drwxr-xr-x - mlk512 users 0 2020-12-02 20:49 job1
drwxr-xr-x - mlk512 users 0 2020-12-02 20:50 job2
drwxr-xr-x - mlk512 users 0 2020-12-02 20:50 job3
drwxr-xr-x - mlk512 users 0 2020-12-02 20:50 job4
drwxr-xr-x - mlk512 users 0 2020-12-02 11:45 project
[mlk512@login-1 ~]$ hdfs dfs -rm -r job*
20/12/02 20:51:15 INFO fs.TrashPolicyDefault: Moved: 'hdfs://dumbo/user/mlk512/job1' to trash at: hdfs://dumbo/user/mlk512/.Trash/Current/user/mlk512/job11606960275783
20/12/02 20:51:15 INFO fs.TrashPolicyDefault: Moved: 'hdfs://dumbo/user/mlk512/job2' to trash at: hdfs://dumbo/user/mlk512/.Trash/Current/user/mlk512/job21606960275827
20/12/02 20:51:15 INFO fs.TrashPolicyDefault: Moved: 'hdfs://dumbo/user/mlk512/job3' to trash at: hdfs://dumbo/user/mlk512/.Trash/Current/user/mlk512/job31606960275871
20/12/02 20:51:15 INFO fs.TrashPolicyDefault: Moved: 'hdfs://dumbo/user/mlk512/job4' to trash at: hdfs://dumbo/user/mlk512/.Trash/Current/user/mlk512/job41606960275921
[mlk512@login-1 ~]$ hdfs dfs -rm -r covid
20/12/02 20:51:52 INFO fs.TrashPolicyDefault: Moved: 'hdfs://dumbo/user/mlk512/covid' to trash at: hdfs://dumbo/user/mlk512/.Trash/Current/user/mlk512/covid1606960312504
[mlk512@login-1 ~]$ cd FinanceHadoop/
[mlk512@login-1 FinanceHadoop]$ hdfs dfs -put covid
[mlk512@login-1 FinanceHadoop]$ hdfs dfs -ls
Found 10 items
drwxr-xr-x - mlk512 users 0 2020-12-02 20:41 .Trash
drwxr-xr-x - mlk512 users 0 2020-12-01 04:45 .sparkStaging
drwxr-xr-x - mlk512 users 0 2020-12-02 20:50 .staging
drwxr-xr-x - mlk512 users 0 2020-12-02 20:52 covid
drwxr-xr-x - mlk512 users 0 2020-09-18 17:12 hw2
drwxr-xr-x - mlk512 users 0 2020-09-22 14:14 hw3
drwxr-xr-x - mlk512 users 0 2020-10-14 10:36 hw4
drwxr-xr-x - mlk512 users 0 2020-10-25 21:21 hw5
drwxr-xr-x - mlk512 users 0 2020-11-20 03:50 hw8
drwxr-xr-x - mlk512 users 0 2020-12-02 11:45 project
[mlk512@login-1 FinanceHadoop]$ cd covid
[mlk512@login-1 covid]$ sh runall.sh
packageJobJar: [] [/opt/cloudera/parcels/CDH-5.15.2-1.cdh5.15.2.p0.3/jars/hadoop-streaming-2.6.0-cdh5.15.2.jar] /tmp/streamjob3960899564153013801.jar tmpDir=null
20/12/02 20:53:19 INFO mapred.FileInputFormat: Total input paths to process : 1
20/12/02 20:53:19 INFO mapreduce.JobSubmitter: number of splits=2
20/12/02 20:53:19 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1604346392376_7673
20/12/02 20:53:20 INFO impl.YarnClientImpl: Submitted application application_1604346392376_7673
20/12/02 20:53:20 INFO mapreduce.Job: The url to track the job: http://babar.es.its.nyu.edu:8088/proxy/application_1604346392376_7673/
20/12/02 20:53:20 INFO mapreduce.Job: Running job: job_1604346392376_7673
20/12/02 20:53:24 INFO mapreduce.Job: Job job_1604346392376_7673 running in uber mode : false
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28/12/02 20:53:24 INFO mapreduce.Job: map 0% reduce 0%
28/12/02 20:53:29 INFO mapreduce.Job: map 100% reduce 0%
28/12/02 20:53:34 INFO mapreduce.Job: map 100% reduce 100%
28/12/02 20:53:37 INFO mapreduce.Job: Job job_1604346392376_7673 completed successfully
28/12/02 20:53:37 INFO mapreduce.Job: Counters: 49
  File System Counters
    FILE: Number of bytes read=2670
    FILE: Number of bytes written=479999
    FILE: Number of read operations=0
    FILE: Number of large read operations=0
    FILE: Number of write operations=0
    HDFS: Number of bytes read=20262
    HDFS: Number of bytes written=3353
    HDFS: Number of read operations=9
    HDFS: Number of large read operations=0
    HDFS: Number of write operations=2
  Job Counters
    Launched map tasks=2
    Launched reduce tasks=1
    Data-local map tasks=2
    Total time spent by all maps in occupied slots (ms)=19002
    Total time spent by all reduces in occupied slots (ms)=18840
    Total time spent by all map tasks (ms)=4773
    Total time spent by all reduce tasks (ms)=3140
    Total vcore-milliseconds taken by all map tasks=4773
    Total vcore-milliseconds taken by all reduce tasks=3140
    Total megabyte-milliseconds taken by all map tasks=19550208
    Total megabyte-milliseconds taken by all reduce tasks=19292160
  Map-Reduce Framework
    Map input records=194
    Map output records=194
    Map output bytes=3353
    Map output materialized bytes=2753
    Input split bytes=180
    Combine input records=0
    Combine output records=0
    Reduce input groups=194
    Reduce shuffle bytes=2753
    Reduce input records=194
    Reduce output records=194
    Spilled Records=388
    Shuffled Maps =2
    Failed Shuffles=0
    Merged Map outputs=2
    GC time elapsed (ms)=602
    CPU time spent (ms)=11600
    Physical memory (bytes) snapshot=2570874800
    Virtual memory (bytes) snapshot=11207086272
    Total committed heap usage (bytes)=4413680672
  Shuffle Errors
    BAD_ID=0
    CONNECTION=0
    IO_ERROR=0
    WRONG_LENGTH=0
    WRONG_MAP=0
    WRONG_REDUCE=0
  File Input Format Counters
    Bytes Read=20082
  File Output Format Counters
    Bytes Written=3353
28/12/02 20:53:37 INFO streaming.StreamJob: Output directory: /user/mlk512/job1
packageJobJar: [l /opt/cloudera/parcels/CDH-5.15.2-1.cd5.15.2.p0.3/jars/hadoop-streaming-2.6.0-cdh5.15.2.jar] /tmp/streamjob2330075979582346398.jar tmpDir=null
28/12/02 20:53:41 INFO mapreduce.JobSubmitter: Total input paths to process : 1
28/12/02 20:53:41 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1604346392376_7674
28/12/02 20:53:42 INFO impl.YarnClientImpl: Submitted application application_1604346392376_7674
28/12/02 20:53:42 INFO mapreduce.Job: The url to track the job: http://babar.es.its.nyu.edu:8088/proxy/application_1604346392376_7674/
28/12/02 20:53:42 INFO mapreduce.Job: Running job: job_1604346392376_7674
28/12/02 20:53:46 INFO mapreduce.Job: Job job_1604346392376_7674 running in uber mode : false
28/12/02 20:53:50 INFO mapreduce.Job: map 0% reduce 0%
28/12/02 20:53:50 INFO mapreduce.Job: map 50% reduce 0%
28/12/02 20:53:51 INFO mapreduce.Job: map 100% reduce 0%
28/12/02 20:53:53 INFO mapreduce.Job: map 100% reduce 100%
28/12/02 20:53:57 INFO mapreduce.Job: Job job_1604346392376_7674 completed successfully
28/12/02 20:53:57 INFO mapreduce.Job: Counters: 49
  File System Counters
    FILE: Number of bytes read=2357
    FILE: Number of bytes written=479288
    FILE: Number of read operations=0
    FILE: Number of large read operations=0
    FILE: Number of write operations=0
    HDFS: Number of bytes read=20262
    HDFS: Number of bytes written=3132
    HDFS: Number of read operations=9
    HDFS: Number of large read operations=0
    HDFS: Number of write operations=2
  Job Counters
    Launched map tasks=2
    Launched reduce tasks=1
    Data-local map tasks=2
    Total time spent by all maps in occupied slots (ms)=17964
    Total time spent by all reduces in occupied slots (ms)=13998
    Total time spent by all map tasks (ms)=4491
    Total time spent by all reduce tasks (ms)=2333
    Total vcore-milliseconds taken by all map tasks=4491
    Total vcore-milliseconds taken by all reduce tasks=2333
    Total megabyte-milliseconds taken by all map tasks=18395136
    Total megabyte-milliseconds taken by all reduce tasks=14333952
  Map-Reduce Framework
    Map input records=194
    Map output records=194
    Map output bytes=3132
    Map output materialized bytes=2455
    Input split bytes=180
    Combine input records=0
    Combine output records=0
    Reduce input groups=194
    Reduce shuffle bytes=2455
    Reduce input records=194
    Reduce output records=194
    Spilled Records=388
    Shuffled Maps =2
    Failed Shuffles=0
    Merged Map outputs=2
    GC time elapsed (ms)=398
    CPU time spent (ms)=7820
    Physical memory (bytes) snapshot=2050834432
    Virtual memory (bytes) snapshot=11207356416
    Total committed heap usage (bytes)=4023910400
  Shuffle Errors
    BAD_ID=0
    CONNECTION=0
    IO_ERROR=0
    WRONG_LENGTH=0
    WRONG_MAP=0
    WRONG_REDUCE=0
  File Input Format Counters
    Bytes Read=20082
  File Output Format Counters
    Bytes Written=3132
28/12/02 20:53:57 INFO streaming.StreamJob: Output directory: /user/mlk512/job2
packageJobJar: [l /opt/cloudera/parcels/CDH-5.15.2-1.cd5.15.2.p0.3/jars/hadoop-streaming-2.6.0-cdh5.15.2.jar] /tmp/streamjob2456652904379782217.jar tmpDir=null
28/12/02 20:54:00 INFO mapred.FileInputFormat: Total input paths to process : 1
28/12/02 20:54:00 INFO mapreduce.JobSubmitter: number of splits:2
28/12/02 20:54:01 INFO impl.YarnClientImpl: Submitted application application_1604346392376_7675
28/12/02 20:54:01 INFO mapreduce.Job: The url to track the job: http://babar.es.its.nyu.edu:8088/proxy/application_1604346392376_7675/
28/12/02 20:54:01 INFO mapreduce.Job: Running job: job_1604346392376_7675
28/12/02 20:54:05 INFO mapreduce.Job: Job job_1604346392376_7675 running in uber mode : false
28/12/02 20:54:05 INFO mapreduce.Job: map 0% reduce 0%
28/12/02 20:54:09 INFO mapreduce.Job: map 100% reduce 0%
28/12/02 20:54:15 INFO mapreduce.Job: map 100% reduce 100%
28/12/02 20:54:19 INFO mapreduce.Job: Job job_1604346392376_7675 completed successfully
28/12/02 20:54:19 INFO mapreduce.Job: Counters: 49
  File System Counters
    FILE: Number of bytes read=2617
    FILE: Number of bytes written=479798
    FILE: Number of read operations=0
    FILE: Number of large read operations=0
    FILE: Number of write operations=0
    HDFS: Number of bytes read=20262
    HDFS: Number of bytes written=3268
    HDFS: Number of read operations=9
    HDFS: Number of large read operations=0
    HDFS: Number of write operations=2
  Job Counters
    Launched map tasks=2
    Launched reduce tasks=1
    Data-local map tasks=2
    Total time spent by all maps in occupied slots (ms)=17056
    Total time spent by all reduces in occupied slots (ms)=14454
    Total time spent by all map tasks (ms)=4264
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Total time spent by all reduce tasks (ms)=2409
Total vcore-milliseconds taken by all map tasks=4264
Total vcore-milliseconds taken by all reduce tasks=2409
Total megabyte-milliseconds taken by all map tasks=17465344
Total megabyte-milliseconds taken by all reduce tasks=14808096
Map-Reduce Framework
  Map input records=194
  Map output records=194
  Map output bytes=3268
  Map output materialized bytes=2705
  Input split bytes=180
  Combine input records=0
  Combine output records=0
  Reduce input groups=194
  Reduce shuffle bytes=2705
  Reduce input records=194
  Reduce output records=194
  Spilled Records=388
  Shuffled Maps =2
  Failed Shuffles=0
  Merged Map outputs=2
  GC time elapsed (ms)=362
  CPU time spent (ms)=7360
  Physical memory (bytes) snapshot=2019368960
  Virtual memory (bytes) snapshot=11207389184
  Total committed heap usage (bytes)=3976724480
Shuffle Errors
  BAD_ID=0
  CONNECTION=0
  IO_ERROR=0
  WRONG_LENGTH=0
  WRONG_MAP=0
  WRONG_REDUCE=0
File Input Format Counters
  Bytes Read=20082
File Output Format Counters
  Bytes Written=3268
20/12/02 20:54:19 INFO streaming.StreamJob: Output directory: /user/mlk512/job3
packageJobJar: [ ] /opt/cloudera/parcels/CDH-5.15.2-1.cdh5.15.2.p0.3/jars/hadoop-streaming-2.6.0-cdh5.15.2.jar /tmp/streamjob7919653151580716341.jar tmpDir=null
20/12/02 20:54:24 INFO mapred.FileInputFormat: Total input paths to process : 1
20/12/02 20:55:35 WARN hdfs.DFSClient: Slow ReadProcessor read fields took 65003ms (threshold=30000ms); ack: seqno: -2 reply: 0 reply: 0 reply: 1 downstreamAckTimeNanos: 0, targets:
[DatanodeInfoWithStorage[10.0.255.240:50010,DS-704ad263-5994-4298-9a25-624824581781,DISK], DatanodeInfoWithStorage[10.0.255.221:50010,DS-f4402546-8e51-45ac-8369-d49aaa943e05,DISK],
DatanodeInfoWithStorage[10.0.255.219:50010,DS-7767292c-f382-4fd5-bfa3-4bc6607978bf,DISK]]
20/12/02 20:55:35 WARN hdfs.DFSClient: DFSOutputStream ResponseProcessor exception for block BP-1256044058-128.122.215.50-1440607644284:blk_1167380785_93859278
java.io.IOException: Bad response ERROR for block BP-1256044058-128.122.215.50-1440607644284:blk_1167380785_93859278 from datanode DatanodeInfoWithStorage[10.0.255.219:50010,DS-7767292c-f382-4fd5-
bfa3-4bc6607978bf,DISK]
    at org.apache.hadoop.hdfs.DFSOutputStreamDataStreamer$ResponseProcessor.run(DFSOutputStream.java:1129)
20/12/02 20:55:35 WARN hdfs.DFSClient: Error Recovery for block BP-1256044058-128.122.215.50-1440607644284:blk_1167380785_93859278 in pipeline
DatanodeInfoWithStorage[10.0.255.240:50010,DS-704ad263-5994-4298-9a25-624824581781,DISK], DatanodeInfoWithStorage[10.0.255.221:50010,DS-f4402546-8e51-45ac-8369-d49aaa943e05,DISK],
DatanodeInfoWithStorage[10.0.255.219:50010,DS-7767292c-f382-4fd5-bfa3-4bc6607978bf,DISK]: bad datanode DatanodeInfoWithStorage[10.0.255.219:50010,DS-7767292c-f382-4fd5-bfa3-4bc6607978bf,DISK]
BP-1256044058-128.122.215.50-1440607644284:blk_1167380785_93859278, Write pipeline datanodes: null
20/12/02 20:55:35 INFO mapreduce.JobSubmitter: number of splits=2
20/12/02 20:55:36 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1604346392376_7676
20/12/02 20:55:36 INFO impl.YarnClientImpl: Submitted application application_1604346392376_7676
20/12/02 20:55:36 INFO mapreduce.Job: The url to track the job: http://babar.es.its.nyu.edu:8088/proxy/application_1604346392376_7676/
20/12/02 20:55:36 INFO mapreduce.Job: Job job_1604346392376_7676 running in uber mode : false
20/12/02 20:55:58 INFO mapreduce.Job: map 0% reduce 0%
20/12/02 20:56:02 INFO mapreduce.Job: map 50% reduce 0%
20/12/02 20:56:24 INFO mapreduce.Job: map 100% reduce 0%
20/12/02 20:56:29 INFO mapreduce.Job: map 100% reduce 100%
20/12/02 20:57:11 INFO mapreduce.Job: Job job_1604346392376_7676 completed successfully
20/12/02 20:57:11 INFO mapreduce.Job: Counters: 49
File System Counters
  FILE: Number of bytes read=2302
  FILE: Number of bytes written=479164
  FILE: Number of read operations=0
  FILE: Number of large read operations=0
  FILE: Number of write operations=0
  HDFS: Number of bytes read=20262
  HDFS: Number of bytes written=3047
  HDFS: Number of read operations=9
  HDFS: Number of large read operations=0
  HDFS: Number of write operations=2
Job Counters
  Launched map tasks=2
  Launched reduce tasks=1
  Data-local map tasks=2
  Total time spent by all maps in occupied slots (ms)=102212
  Total time spent by all reduces in occupied slots (ms)=14838
  Total time spent by all map tasks (ms)=25553
  Total time spent by all reduce tasks (ms)=2473
  Total vcore-milliseconds taken by all map tasks=25553
  Total vcore-milliseconds taken by all reduce tasks=2473
  Total megabyte-milliseconds taken by all map tasks=194665088
  Total megabyte-milliseconds taken by all reduce tasks=15194112
Map-Reduce Framework
  Map input records=194
  Map output records=194
  Map output bytes=3047
  Map output materialized bytes=2386
  Input split bytes=180
  Combine input records=0
  Combine output records=0
  Reduce input groups=194
  Reduce shuffle bytes=2386
  Reduce input records=194
  Reduce output records=194
  Spilled Records=388
  Shuffled Maps =2
  Failed Shuffles=0
  Merged Map outputs=2
  GC time elapsed (ms)=631
  CPU time spent (ms)=13110
  Physical memory (bytes) snapshot=2581200896
  Virtual memory (bytes) snapshot=11208491000
  Total committed heap usage (bytes)=388290560
Shuffle Errors
  BAD_ID=0
  CONNECTION=0
  IO_ERROR=0
  WRONG_LENGTH=0
  WRONG_MAP=0
  WRONG_REDUCE=0
File Input Format Counters
  Bytes Read=20082
File Output Format Counters
  Bytes Written=3047
20/12/02 20:57:11 INFO streaming.StreamJob: Output directory: /user/mlk512/job4
[mlk512@login-1-1 covid]$
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